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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,616	09/05/2003	Felix Theeuwes	DURE-009	8016
7:	590 05/04/2006		EXAM	INER
Carol L. France	cis FIELD & FRANCIS LLP	OIPE	нин, ве	NJAMIN
Suite 200	TELD & FRANCIS ELF	0 &	ART UNIT	PAPER NUMBER
285 Hamilton A		MAY . 30	3767	
Palo Alto, CA	94301	MAY 2 4 2006 3)	DATE MAILED: 05/04/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

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•	Application No.	'da	Applicant(s)	The state of the s
	10/656,616	the s	THEEUWES ET	AL.
Office Action Summary	Examiner	·	Art Unit	
	Benjamin Huh		3767	
The MAILING DATE of this communication ap	pears on the cover st	neet with th	e correspondence ad	ddress
Period for Reply	VIA OFT TO EVEID	E AMONT	THE OF THEFT (ON DAVE
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMING 136(a). In no event, however will apply and will expire SIX and apply and apply apply and apply apply apply apply and apply	MUNICA II , may a reply b (6) MONTHS f come ABANDO	e timely filed rom the mailing date of this o NED (35 U.S.C. § 133).	
Status				
1) Responsive to communication(s) filed on 9/5/6				
	s action is non-final.			
3) Since this application is in condition for allowated closed in accordance with the practice under	ance except for forma Ex parte Quayle, 193	al matters, 35 C.D. 11	prosecution as to th , 453 O.G. 213.	e merits is
Disposition of Claims			·	
4) Claim(s) 24-32 and 49-62 is/are pending in th	e application.			
4a) Of the above claim(s) 24-32 is/are withdra	wn from consideration	n.		
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>49-62</u> is/are rejected.				
7) Claim(s) is/are objected to.	er election requireme	ant		
8) Claim(s) are subject to restriction and/	or election requireme	51 IL.		
Application Papers				
9) ☐ The specification is objected to by the Examin	er.		·	:
10)⊠ The drawing(s) filed on <u>05 September 2003</u> is	/are: a)⊠ accepted	or b) L ob	ojected to by the Exa	miner.
Applicant may not request that any objection to the	e drawing(s) be held in	abeyance. Irowing(s) is	see 37 CFR 1.03(a).	ER 1 121(d)
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	ction is required if the c	ttached Of	fice Action or form P	TO-152.
11) I The path or declaration is objected to by the c	Manimer. Note the u			
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreig	n priority under 35 U	.S.C. § 11	9(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:				
1. Certified copies of the priority documer	nts have been receive	ed. - di- Ambli	action No	
2. Certified copies of the priority documer	nts have been receive	ea in Appii	cation No	I Stane
3. Copies of the certified copies of the price.			erved in this realiona	, ctago
application from the International Burea * See the attached detailed Office action for a lis	au (FC) Rule 17.2(a at of the certified copi	es not rec	eived.	
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Attachment(s)	л. П	landau C	nary (PTO-413)	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Pa	per No(s)/Ma	ail Date	
3) X Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	5) 🔲 No	otice of Inform	nal Patent Application (P	ГО-152)
Paper No(s)/Mail Date <u>9/5/03</u> .	6) 🔲 01	her:		

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DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: It is the Examiner's position that Applicant has evoked sixth paragraph, mean-plus-function language to define Applicant's invention in claim 49 ... "a means for divering the flow ...". Therefore the Examiner requires the Applicant to amend the specification pursuant to 37 CFR 1.75(d) and MPEP 608.01(o) to explicitly state, with reference to the terms and phrases of the claim element, what structure, materials, and acts perform the function recited in the claim element. Please note that the MPEP clearly states, "Even if the disclosure implicitly sets forth the structure, materials, or acts corresponding to the means-(or step-) plus-function claim element in compliance with 35 U.S.C. 112, first and second paragraphs, the PTO may still require the applicant to amend the specification pursuant to 37 CFR 1.75(d) and MPEP 608.01(o) ...". (Also see MPEP 2181 (Rev. 1, Feb. 2000))

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 49-51, 53-54, 56-57, & 59-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans (US Patent No. 5466228). The Evans reference discloses a flow regulator for regulating flow of a drug to a treatment site within the body of a subject, the flow regulator in figures 1-2 comprising a drug reservoir see col. 3 lines 41-45, a delivery conduit (43,41) operaby connected to the drug reservoir, a diversion conduit 20 operably connected either to the drug reservoir or to the delivery conduit through the diverting means 10, a means for diverting 10 the flow of drug from the delivery conduit to the diversion conduit, wherein the delivery conduit terminates at or near the treatment site, see col. 3 lines 30-46, and wherein the diversion conduit terminates at a site other than a treatment site and away from the treatment site, wherein the diversion conduit can be seen to be terminating into a waste container 30 in figure 1.

With regards to claim 50, wherein the diversion conduit would be fully capable of terminating at a site within the body of the subject other than the treatment site, due to it's size, shape, and ability to work in the environment.

With regards to claim 51, wherein the means for diverting the flow of drug comprises an adjustable valve, see col. 4 lines 12-52.

With regards to claim 53, wherein the flow regulator is fully capable of being fully implantable within the body of the subject, due to it's size, shape, and ability to work in the environment.

With regards to claim 54, wherein the valve comprises a rotatable valve, see col. 4 lines 12-52.

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With regards to claim 56, wherein the delivery conduit and the diversion conduit intersect in a substantially T-shaped configuration, see figures 2A-2F in which the intersect is in a substantially T-shaped configuration.

With regards to claim 57, further comprising a waste reservoir 30 in fluid communication with the diversion conduit, see figure 1.

With regards to claim 59, wherein the delivery conduit comprises an attachment element, seen as the opposite end of the delivery conduit tubing which would be fully capable of attaching a drug delivery device for delivery of drug into the delivery conduit to due to it's size, shape, and ability to work in the environment.

With regards to claims 60-61, see col. 3 lines 30-39.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (US Patent No. 5466228) in view of Thompson (US Patent No. 4350155). Now even though the Evans reference does not explicitly disclose the remotely adjustable valve attention is directed to Thompson. The Thompson reference teaches a remotely adjusting valve in implanted systems with a power source, see col. 1 lines 35-38 & col. 3 lines 29-33. Therefore, it would have been obvious to one of ordinary skill in the art at

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the time of the invention to use the teachings of Thompson in the regulator and system of Evans in order to obtain efficient control and access of the valve.

Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (US Patent No. 5466228) in view of Bouchard et al (US Patent No.6416293). Now even though Evans does not explicitly disclose the use of a solenoid valve attention is directed to Bouchard. The Bouchard reference teaches the use of a solenoid valve, see col. 11 lines 55-62. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device of Evans to utilize the valve of Bouchard in order to provide an efficient and reliable valve.

Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (US Patent No. 5466228) in view of Savage et al (US Patent No. 5882602). Now even though Evans does not explicitly disclose the self-sealing septum in the waste reservoir attention is directed to Savage. The Savage reference teaches the use of a self-sealing septum, see col. 8 lines 40-52. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Savage in the regulator of Evans in order to provide access to the waste reservoir.

Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (US Patent No. 5466228) in view of Idriss (US Patent No. 4838887). Now even though Evans does not explicitly disclose the use of a programmable valve attention is

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directed to Idriss. The Idriss reference teaches the use of programmable valves, see col. 4 lines 39-45. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Idriss in the regulator of Evans in order to achieve a higher level of control of the flow controlled by the valve.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sipin (US Patent No. 6280408B1) also discloses the use of solenoid valves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Huh whose telephone number is 571-272-8208. The examiner can normally be reached on M-F: 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on 571-272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BH

KEVIN SIRMONS PRIMARY EXAMINER

Mwin C. Sermons

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in and envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313
On: 487 163 970 903

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	Herewith	
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U.S. PATENT DOCUMENTS								
Examiner's Initials	Cite No.	U.S. Patent Document Number and Kind (If known)	Date of Publication (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines where Relevant Passages or figures appear			
вин	1	4,299,220	11-10-1981	Dorman				
	2	4,350,155	09-21-1982	Thompson				
	3	4.360,019	11-23-1982	Portner, et al				
7/7	4	4.544,371	10-01-1985	Dormandy, Jr. et al.				
$-\Psi$	5	4,692,147	09-08-1987	Duggan				

FOREIGN PATENT DOCUMENTS							
Examiner's Initials	Cite No.	Foreign Patent Document Number	Country	Name of Patentee or Applicant	Date of Publication (MM-DD-YYYY)	Translation (Y/N)	
		FD 0 400 CU D1	EP -	Compou	07-13-1990	N -	
DUU	1	WO 99/38552	wo	Haller, et al.	08-05-1999	N	

	OTHER PRIOR ART						
Examiner's Initials	Cite No.	AUTHOR, title of article, title of item, date, pages, volume/issue numbers, publisher, city and/or country published	Translation (Y/N)				

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Signature	/Benjamin	Hun/	' l Considerea	1 -	

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicants wish to call to the attention of the Examiner the enclosed "Information Disclosure Statement." The right is reserved to antedate any item in accordance with standard procedure.

Citation of the documents is not to be construed as an admission that the documents are necessarily prior art with respect to the instant invention. This submission is understood to complement the results of the Examiner's own independent search. Citation of the documents shall not be construed as a representation that a search has been made of that the cited items are inclusive of all the relevant and material citations that may be available publicly. Some of the documents may have markings thereon. No significance is meant to be attached to the markings.

Applicants respectfully request that the cited documents be considered by the Examiner and that an initialed copy of the Information Disclosure Statement be returned to Applicants.

It is believed that this disclosure complies with 37 CFR §§ 1.56, 1.97 and 1.98 and the Manual of Patent Examining Procedures § 609. If for some reason the Examiner considers otherwise, please telephone the undersigned. Applicants believe that no fee is due with this paper. However, if the Commissioner determines that a fee is

necessary, the Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1953. A duplicate copy of this communication is enclosed.

Complete if Known To be assigned US Department of Commerce, Patent and **Application Number Trademark Office** Herewith **Filing Date** LIST OF REFERENCES CITED BY First Named Inventor Theeuwes, et al. **APPLICANTS** Group Art Unit unknown unknown **Examiner Name** Substitute for form 1449 Attorney Docket Number DURE-009 CON Of 2 Sheet 2

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William .

U.S. PATENT DOCUMENTS							
Examiner's Initials*	Cite No.	U.S. Patent Document Number and Kind (If known)	Date of Publication (MM-DD-YYYY)	Name of Patentee or Applicant	Pages, Columns, Lines where Relevant Passages or figures appear		
ВНН	8	4,718,893	01-12-1988	Dorman et al.			
	9	4,781,672	11-01-1988	Hooven			
	ю	5,697,153	12-16-1997	Saaski, et al.			
	U	5,702,618	12-30-1997	Saaski, et al.			
	12	5,088,983	02-18-1992	Burke			
_	13	5,820,589	10-13-1998	Torgerson et al.			
	14	5,897,096	04-27-1999	Nakano			
	15	3,648,694	03-14-1972	Mogos, et al.			
	16	4,562,829	01-07-1986	Bergner			
	17	4,585,941	04-29-1986	Bergner			
	18	5,800,408	09-01-1998	Strauss, et al.			
	19	5,466,228	11-14-1995	Evans			
	20	5,927,951	07-27-1999	Tamari			
	21	6,158,467	12-12-2000	Loo			
7/	22	3,949,744	04-13-1976	Clarke			
-₩-	23	4,525,165	06-25-1985	Fischell			

	FOREIGN PATENT DOCUMENTS							
Examiner's Initials*	Cite No.	Foreign Patent Document Number	Country	Name of Patentee or Applicant	Date of Publication (MM-DD-YYYY)	Translation (Y/N)		

OTHER PRIOR ART					
Examiner's		AUTHOR, title of article, title of item, date, pages, volume/issue numbers, publisher, city and/or country published	Translation (Y/N)		
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Examiner Signature	/Benjamin Huh/	Date Considered	5/01/06
Signature			

^{*}Examiner: Initial if reference considered, whether of not citation is in conformance with MPEP 609; Draw a line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

Notice of References Cited Application/Control No. 10/656,616 Examiner Benjamin Huh Applicant(s)/Patent Under Reexamination THEEUWES ET AL. Art Unit Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	Α	US-5,466,228	11-1995	Evans, John M.	604/248
*	В	US-4,350,155	09-1982	Thompson, Howard J.	604/891.1
*	C	US-6,416,293	07-2002	Bouchard et al.	417/53
*	D	US-5,882,602	03-1999	Savage et al.	422/103
*	E	US-4,838,887	06-1989	Idriss, Samir F.	604/891.1
*	F	US-6,280,408	08-2001	Sipin, Anatole J.	604/65
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	x	their furithed with this Office action (See MDER 8 707 05(a))

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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